IN THE CLAIMS:

Cancel claims 1-13, and add claims 14-25 as shown on the following pages.

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Cancelled).

7. (Cancelled).

8. (Cancelled).

9. (Cancelled).

10. (Cancelled).

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (New). A system for maintaining an IC-module near a set-point temperature while electrical power dissipation in said IC-module is varied; said system being comprised of:

a container having an open end with a seal for pressing against said IC-module;

at least one nozzle, in said container, for spraying a liquid coolant on said IC-module when said seal is pressed against said IC-module;

a pressure reducing means, coupled to said container, for producing a sub-atmospheric pressure between said container and said IC-module when said seal is pressed against said IC-module; and,

said pressure reducing means including a pressure regulating means for maintaining said sub-atmospheric pressure such that the boiling point of said liquid coolant is lower by at least 10°C from its boiling point at atmospheric pressure, while the temperature of said IC-module is kept near said set-point.

15. (New). A system according to claim 14 wherein said pressure reducing means reduces said sub-atmospheric pressure to a point where essentially all of said liquid coolant from each nozzle rapidly vaporizes when it hits said IC-module.

16. (New). A system according to claim 15 which further includes a circulation subsystem, coupled to each nozzle, that holds said liquid coolant; and wherein said liquid coolant consists essentially of water.

17. (New). A system according to claim 15 which includes multiple nozzles at spaced-apart locations in said container, and each nozzle includes a means for receiving one control signal and a means for ejecting just a single droplet of said liquid coolant when it receives said one control signal.

18. (New). A system according to claim 17 which further includes a closed-loop control means for: a) receiving a sensor signal representing a sensed temperature of said IC-module, and b) sending said control signal to all of said nozzles simultaneously with a frequency that increases as the differences between said sensed temperature and said set-point increases.

19. (New). A system according to claim 17 which further includes a closed-loop control means for: a) receiving a sensor signal representing a sensed temperature of said IC-module, b) sending said control signal to a subset of said nozzles simultaneously, and c) increasing the number of nozzles in said subset as the difference between said sensed temperature and said set-point increase.

20. (New). A system according to claim 17 wherein said means for ejecting in each nozzle ejects said single droplet by squeezing said coolant with a piezoelectric device.

21. (New). A system according to claim 17 wherein said means for ejecting in each nozzle ejects said single droplet by heating said coolant with an electric heater.

22. (New). A system according to claim 15 wherein each nozzle includes a means for receiving one control signal and a means for spraying multiple droplets of said liquid coolant when it receives said one control signal.

23. (New). A system according to claim 22 which further includes a closed-loop control means for: a) receiving a sensor signal representing a sensed temperature of said IC-module, and b) sending said control signal with an ON-OFF ratio that increases as the difference between said sensed temperature and said set-point increases.

24. (New). A system according to claim 15 wherein said seal is shaped to encircle a surface on said IC-module which encloses an IC-chip.

25. (New). A system according to claim 15 wherein said seal is shaped to encircle an exposed surface on an IC-chip in said IC-module.